



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|-------------|----------------------|---------------------|------------------|
| 10/519,514 | 09/23/2005 | Zia Shlaimoun | THOM-0038 | 5266 |
| 23377 | 7590 | 08/28/2007 | EXAMINER | |
| WOODCOCK WASHBURN LLP | | | LAXTON, GARY L | |
| CIRA CENTRE, 12TH FLOOR | | | | |
| 2929 ARCH STREET | | | ART UNIT | PAPER NUMBER |
| PHILADELPHIA, PA 19104-2891 | | | 2838 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 08/28/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/519,514 | SHLAIMOUN, ZIA |
| | Examiner | Art Unit |
| | Gary L. Laxton | 2838 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 30 March 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,2,4-7,9-11,13-15,17-24,26-29 and 31 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2,4-7,9-11,13-15,17-24,26-29 and 31 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 December 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>3/30/07</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Arguments***

1. Applicant's arguments filed 3/30/2007 have been fully considered but they are not persuasive.

The applicant contends that DeLange does not disclose the voltage at the outputs to be compared with a predetermined voltage and for the voltage at the output to be adjusted to increase or decrease the output voltage. DeLange expressly disclose the “[t]he SCR pairs 16-18 are triggered, or fired, by a control circuit that includes a microcomputer 30, three line voltage detectors 21, 22, and 23, and a trio of voltage comparators 24, 25, and 26.” (See col. 3 lines 8-11). Moreover, DeLange further explains the control scheme in column 6, lines 24-30 & 38-45 wherein the means for comparing and adjusting are integral components in controlling the output voltage. Accordingly, the examiner maintains the rejections.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the means for comparing the output voltage with a predetermined voltage and generating a comparison signal of claim 1; the variable ac transformer of claim 10; and, the single phase supply voltage of claim 15 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The applicant refuses to illustrate the limitations clearly recited in the claims. 37 CFR 1.83(a) states: "The drawings in a nonprovisional application must show every feature of the invention specified in the claims." In other words, if it is claimed, then it must be shown. The features that are still not shown are: the comparator, the predetermined voltage; the variable AC transformer is clearly not shown, regardless of whether this is an alternate embodiment. The same goes for the "single phase supply voltage". Just because these limitations are alternate embodiments does not relieve the

Art Unit: 2838

applicant from the duty to show ever feature of the invention as specified in 37 CFR 1.83(a).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 4-7, 9, 13-15, 17-19, 21-24, 26-29 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by DeLange.

DeLange discloses an input (A, B, C); output (41-43); means for comparing (24-26); predetermined voltage (gnd); means for adjusting (14) comprising thyristor modules (16-18); means for delaying and reducing amplitude (30).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 2838

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claims 10 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLange in view of Bertenshaw et al.

DeLange discloses the claimed subject matter in regards to claim 1 supra, except for using an AC transformer for reducing the amplitude of the output voltage.

Bertenshaw et al teach a power controller having a controllable thyristor to compensate for perturbations in the supply waveform. Furthermore, Bertenshaw et al teach that it is possible to use a variable resistor or transformer for varying the power supplied to the load.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify DeLange to include an AC transformer as taught by Bertenshaw et al for reducing the amplitude of the output voltage.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeLange in view of Koyama et al.

DeLange discloses the claimed subject matter in regards to claim 1 supra, except for a bypass switch.

Koyama et al teach using a bypass switch in parallel to a thyristor module in order to switch the by pass on and off to reduce losses in the thyristor modules.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify DeLange to include bypass switches in parallel with the

Art Unit: 2838

thyristor modules in order to reduce the losses in the thyristor modules by bypass frequently bypass the modules with the bypass switch as taught by Koyama et al.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (571) 272-2079. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on (571) 272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2838

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gary L. Laxton
Primary Examiner
Art Unit 2838

8/20/2007